

# Wade Roberts

Ph.D. Candidate  
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## Education

Washington State University, Pullman, WA | Aug 2012 – May 2017 (anticipated)  
Ph.D. in Molecular Plant Sciences  
Dissertation title: Evolutionary genomics of flower diversification in *Achimenes* (Gesneriaceae)  
Major supervisor: Dr. Eric H. Roalson  
Committee: Drs. Amit Dhingra, Joanna L. Kelley, and Andrew McCubbin

Whitworth University, Spokane, WA | Sep 2007 – May 2012  
B.S. with Honors in Biology  
B.A. with Honors in Art, sculpture and ceramics  
Advisors: Dr. Lee Anne Chaney and Ms. Katie Creyts

## Experience

Teaching Assistant, Washington State University | Aug 2013 – Present  
Lab instructor in the School of Biological Sciences  
Lower- and upper-division classes in Biology and Botany

Research Assistant, Roalson Lab, Washington State University | Aug 2012 – Aug 2013  
PI: Dr. Eric Roalson, School of Biological Sciences  
Phylogenetics and population genetics of Gesneriaceae and Cyperaceae  
Construction and maintenance of high performance computational server

Undergraduate Research, Whitworth University | Sep – Dec 2011  
PI: Dr. Finn Pond, Biology Department  
Bioinformatics and molecular cloning of genes from *Rhodospirillum rubrum*

NSF Research Experience for Undergraduates, North Carolina State University | May – Aug 2011  
PI: Dr. Jenny Xiang, Department of Plant and Microbial Biology  
Molecular cloning and phylogenetics of *SEP* genes from dogwoods

## Publications

Roberts W.R., Roalson E.H. 2017. Comparative transcriptome analyses of flower development in four species of *Achimenes* (Gesneriaceae). BMC Genomics. Accepted.

Roalson E.H., Roberts W.R. 2016. Distinct processes drive diversification in different clades of Gesneriaceae. Systematic Biology. 65(4): 662-684. \*Cover Image\*

## In Review / In Prep

Roberts W.R., Crabb J.L., Dhingra A., Roalson E.H. Micropropagation and genetic transformation of *Achimenes erecta* (Gesneriaceae). (In prep for Plant Cell, Tissue and Organ Culture)

## Presentations

Dissecting floral diversification in the magic flowers (*Achimenes*, Gesneriaceae)  
WSU SBS Graduate Student Symposium, Pullman, WA | Mar 2016 (invited talk)

Exploring phylogenetic relationships in *Achimenes* (Gesneriaceae) using transcriptome sequencing  
WSU SBS Graduate Student Symposium, Pullman, WA | Mar 2016 (poster)  
WSU Plant Sciences Retreat, Pullman, WA | Mar 2016 (poster)

Floral diversification in Gesneriaceae: macroevolutionary and genomics approaches  
WSU Molecular Plant Sciences Seminar, Pullman, WA | Oct 2016 (invited seminar)

Using comparative transcriptomics to understand flower diversification: an example from *Achimenes* (Gesneriaceae)  
Inland Northwest Genomics Research Symposium, Moscow, ID | May 2016 (poster) \*Poster award\*  
WSU SBS Graduate Student Symposium, Pullman, WA | Mar 2016 (invited talk + poster)  
WSU Academic Showcase, Pullman, WA | Mar 2016 (poster)  
WSU Plant Sciences Retreat, Pullman, WA | Mar 2016 (poster)

Understanding flower diversification in *Achimenes* (Gesneriaceae) using a comparative transcriptomics approach  
Pan-Am Evo Devo, Berkeley, CA | Aug 2015 (poster)  
Botany, Edmonton, AB | Jul 2015 (talk)

Geographic processes drive diversification in different clades of Gesneriaceae  
WSU Plant Sciences Retreat, Pullman, WA | Mar 2015 (poster)  
WSU SBS Graduate Student Symposium, Pullman, WA | Feb 2015 (poster)

Cloning and evolutionary analyses of *SEPALLATA3* genes from dogwoods – deciphering the genetic links to bract petaloidy  
NC State Undergraduate Summer Research Symposium, Raleigh, NC | July 2011 (poster)

#### Selected Awards

2016 NSF Doctoral Dissertation Improvement Grant, Co-PI (\$19,323)  
2016 Elvin McDonald Research Endowment Fund, The Gesneriad Society (\$1,750)  
2012 Global Plant Sciences Initiative Fellowship, Washington State University (\$10,000)  
2011 NSF REU Fellowship, North Carolina State University (\$5,000)  
2007 Trustee Scholarship, Whitworth University (\$18,000 x4)

#### Teaching

Graduate Teaching Assistant, Washington State University | Aug 2013 – Present  
Biol 332 Systematic Botany (x2, rating: 4.9 / 5)  
Biol 120 Introductory Botany (x2, rating: 4.8 / 5)  
Biol 106 Introductory Biology: Organismal Biology (x5, rating: 4.7 / 5)

Teaching Assistant / Supplemental Instructor, Whitworth University | Feb 2010 – May 2012  
Bio 363 Genetics  
Bio 153 Plant Biology (x2)  
Bio 141 General Biology I: Organismal Biology

#### Service + Outreach

Faculty Representative, MPS Graduate Student Organization | April 2016 – Present  
Student liaison for MPS fellows at annual faculty meetings  
Voice concerns, suggestions, comments, and grievances to faculty

Co-Lead, Palouse Discovery Science Center Committee | Nov 2014 – 2016  
Organize hands-on workshops in plant science and biology for children and families  
Creation and implementation of permanent plant biology exhibit

Exhibit Lead, Plant Science Day | Apr 2016

Organized and lead hands-on exhibits in science and plant biology for children and families

Native Plant / Greenhouse Guide, Palouse Outdoor Science Day | Oct 2015, Apr 2015, Oct 2014  
Organized and lead short hikes for children and families to identify and collect wildflowers  
Lead tours of living plant collection at Washington State University

#### Freelance

##### Consulting

Joshua Brindley, Washington State University (phylogenetics, bioinformatics)  
Derek Denney, Washington State University (genomics, bioinformatics)

#### Student Mentoring

##### Graduates

Joseph Kleinkopf (Fall 2016 – Present)

##### Undergraduates

Julian Bennett-Ponsford (Fall 2015 – Spring 2016)  
Becca Saunders (Spring 2016)

#### Memberships

Botanical Society of America (2012 – Present)  
The Gesneriad Society (2012 – Present)  
American Society of Plant Taxonomists (2014 – present)  
Society for the Study of Evolution (2014 – present)  
Pan-American Society for Evolutionary Developmental Biology (2015 – 2016)

#### Software

TACOCAT Trim And COnstruct Combined Assembly Transcriptomes